Jerome Weston

Contact Information	University of Dubrovnik Department of Electrical and Computer Engineering Dubrovnik, Croatia	+1 (337) 794-1366 `jweston@unidu.hr`

Research Interests

Systems and Controls with Engineering Applications

Education

Louisiana State University

Ph.D Mathematics (August 2018). Advisor: Dr. Michael Malisoff, Roy Paul Daniels Professor

B.S. in Mathematics, May 2013. Cum laude graduate, with minor in computer science

Research Experience

Sept 2018 -	Postdoctoral Researcher Advisor: Dr. Martin Lazar, Department of Electrical and Computer Engineering University of Dubrovnik
May 2017 - July 2018	Body Shape Analysis Advisor: Dr. Peter Wolenski, Department of Mathematics Louisiana State University, LSU Math Consultation Clinic
May-June 2016	Infant Suck Detection Interface Advisor: Dr. Peter Wolenski, Department of Mathematics Louisiana State University, LSU Math Consultation Clinic
2015 - 2018	NSF Research Assistant Advisor: Dr. Michael Malisoff, Department of Mathematics
2012 - 2013	Scattering Off of an Unusual Boundary - Undergraduate Thesis Advisor: Dr. Stephen Shipman, Department of Mathematics Louisiana State University
June 2012	Sampling Theory Advisor: Dr. Mark Davidson, Department of Mathematics Louisiana State University, NSF VIGRE Summer Program
June 2011	Phase Plane Diagrams of Differential Equations Advisor: Dr. Mark Davidson, Department of Mathematics Louisiana State University, NSF VIGRE Summer Program

Publications

F. Mazenc, M. Malisoff, and J. Weston, *New Bounded Backstepping Control Designs for Time-Varying Systems under Converging Input Converging State Conditions*. Proceedings of the IEEE Conference on Decision and Control, Las Vegas, NV, 2016, pp. 3167-3171, DOI: 10.1109/CDC.2016.7798744.

J. Weston, M. Malisoff, and F. Mazenc, *Sequential Predictors under Time-Varying Delays: Effects of Delayed State Observations in Dynamic Controller*. Proceedings of the IEEE Conference on Decision and Control, Melbourne, Australia, 2017, pp. 4351-4356. DOI: 10.1109/CDC.2017.8264301.

F. Mazenc, M. Malisoff, L. Burlion, and J. Weston, *Bounded Backstepping Control and Robustness Analysis for Time-Varying Systems under Converging Input Converging State Conditions*. European Journal of Control, accepted in February 2018, in press. DOI: 10.1016/j.ejcon.2018.02.005.

J. Weston and M. Malisoff, *Sequential Predictors under Time-Varying Feedback and Measurement Delays and Sampling.* IEEE Transactions on Automatic Control, accepted in September 2018, in press.

Sobhiyeh et al., *Universal Software for Automated Anthropometry Measurements: Evaluation with Two Different Systems.* Proceedings of the 11th International Symposium on In Vivo Body Composition Studies, New York, NY, 2018, in press.

J. Weston, *Backstepping and Sequential Predictors for Control Systems*, Ph.D. Dissertation.

CONFERENCE
TALKS

New Bounded Backstepping Control Designs for Time-Varying Systems under Converging Input Converging State Conditions, Midwest Optimization Meeting, Michigan State University (October 2016) and IEEE Conference of Decision and Control, Las Vegas, NV (December 2016).

Sequential Predictors under Time-Varying Feedback and Measurement Delays and Sampling, 42nd SIAM Southeastern Atlantic Sectional Conference (March 2018) and 9th Conference on Applied Mathematics and Scientific Computing, Sibenik, Croatia (September 2018).

EXTENDED
PROFESSIONAL
TRAVEL

July 2016	American Control Conference 2016, Boston, Massachusetts
	MSRI Summer School on Electronic Structure Theory, Berkeley, California

OTHER TALKS

Cops & Robbers: A differential game, MathCircle, Louisiana State University. (June 2015)
Intro to Calculus of Variations, Liquid Crystals Seminar (Informal), Louisiana State University. (April 2017)

TEACHING
EXPERIENCE

October, 2014	Lecturer, LSU ACT Test Prep
Jan-Dec, 2017	Math Tutor, Gardere Initiative
August-December, 2017	MATH 1550 Teaching Assistant, LSU

HONORS AND
AWARDS

2013-2015	Louis Stokes Alliance for Minority Participation & Bridge to the Doctorate Fellowship

GRADUATE
COURSEWORK

- ❑ Real Analysis (MATH 7311)
- ❑ Complex Analysis (MATH 7350)
- ❑ Ordinary Differential Equations (MATH 7320)
- ❑ Partial Differential Equations (MATH 7386)
- ❑ Probability (MATH 7360)
- ❑ Stochastic Analysis (MATH 7366)
- ❑ Functional Analysis (MATH 7330)
- ❑ Calculus of Variations (MATH 7390)
- ❑ Topics in Material Science (MATH 7384)
- ❑ Numerical Linear Algebra (MATH 7710)
- ❑ Finite Element Method (MATH 7325)
- ❑ Topics in Numerical Analysis (MATH 7390)

RELEVANT
SKILLS

Computer Languages:	C++, Python
Software:	MATLAB, Mathematica, LaTeX

SERVICE

Organizer of Minisymposium "New Control Methods for Dynamic Systems" at 42nd SIAM Southeastern Atlantic Sectional Conference (March 2018)

REFERENCES   **Mark Davidson**, Professor, Louisiana State University,
1-225-578-1581, `davidson@lsu.edu`

Michael Malisoff, Roy Paul Daniels Professor, Louisiana State University,
1-225-578-6714, `malisoff@lsu.edu`

Stephen Shipman, Professor, Louisiana State University,
1-225-578-1674, `shipman@math.lsu.edu`

Terrie White, Senior Instructor, Louisiana State University,
1-225-578-1898, `twhite3@lsu.edu`

Peter Wolenski, Russell B. Long Professor, Louisiana State University,
1-225-578-1606, `wolenski@math.lsu.edu`